Supplement to

Vol. 23, No. 8 **August, 1931**

JOURNAL OF THE AMERICAN WATER WORKS ASSOCIATION

29 West 39th Street, New York, N. Y.

MONTHLY NEWS BULLETIN

News of the Sections

Missouri Valley Section: Their fall meeting will be held October 29 to 31, 1931, at Lawrence, Kans.

Wisconsin Section: They have selected October 26 and 27, 1931, for the dates of their next meeting to be held at the Hotel Racine, Racine, Wisc.

AT THE Main Session the afternoon of Monday, May 25, 1931, of the American Water Works Association convention at Pittsburgh, Pa., one of the topics discussed was the "Non-Shock Pressure Ratings" assigned to Cast Iron Pipe Fittings in the standards so far issued by B-16, the Sectional Committee on Pipe Flanges and Fittings, functioning under the American Standards Association.

Following the discussion on this matter the following resolution was passed at this meeting by the American Water Works Association:

"WHEREAS the American Standards Association has released under date of April 1931 a draft of a proposed standardization of cast iron fittings, which includes fittings for the conveyance of water, and

"WHEREAS in this draft there are standards set up under the heading of 'non-shock water pressure ratings on fittings,' and

"WHEREAS in pipe systems designed for the conveyance of water there is virtually always present the possibility of a material increase in pressure due to the occurrence of water hammer, and

"WHEREAS the members of the American Water Works Association are representative of those engaged in the United States and Canada in the water works field,

"*Be it resolved* by the American Water Works Association that the title 'non-shock water pressure ratings on fittings' is misleading, as indicating a condition in the use of fittings that practically does not exist, and that the American Water Works Association protests against the use of this title in connection with the proposed standardization of flanged cast iron fittings by the American Standards Association, and

"*Be it further resolved* that a copy of this resolution be sent to the American Standards Association."

THE Institution of Water Engineers, Parliament Mansions, Westminster, S. W. 1, England, have issued an excellent Committee Report on "Burst Water Mains." A number of tables are included. The general conclusions are as follows:

1. There has been an actual decrease in the frequency of fractures in mains of all sizes during the last five years as compared with a similar period fifteen years ago, but this decrease is slight.

2. Failures are more frequent in a year which embraces an exceptionally severe and prolonged frost period than during one of more average conditions. The increased frequency is principally in the smaller service mains carrying water of low temperature and where the joints are of a kind not permitting of expansion and contraction.

3. The number of fractures per unit length of main is greater in mains conveying water from surface sources of supply than in the case of mains carrying water from underground sources.

4. The greater liability to failure in the case of small size mains in cold weather may be attributed to some extent to the number of supply pipes, hydrants with their connections, and other apparatus in which the water lies nearer to the surface of the ground.

5. Vibration due to heavy traffic is an important cause of the failure of mains, particularly in cases where the cover over the main is shallow. The proportion of fractures in mains under the carriageway is nearly six times as great as that under the footway having regard to the respective lengths of mains laid in the two positions.

6. The proximity of tramways is in many cases a contributory cause of failures.

7. The operations of other Undertakers, interfering with or removing the support, account for a high proportion of the "major bursts" or fractures of water mains of large diameter.

8. Excavations for deep basements in building sites abutting upon the streets are a distinct menace to the stability of water mains.

9. Although the Returns did not reveal instances of bursts from air locks, we consider it desirable to refer to the necessity of providing and maintaining efficient air reliefs in the system of water mains.

The First International Congress of the New International Association for Testing Materials will be held at Zurich, Switzerland, September 6 to 12, 1931. The General Secretary is Prof. M. Ros, Dr.h.c., 27, Leonhardstrasse, Zurich, Switzerland.

Flow Powergraph

A DIAGRAM has been prepared by A. T. Clark, Chief Engineer, Community Water Service Company, 46 Cedar Street, New York, N. Y., and M. B. Frost also of Community Water Service Company, in connection with a paper on the discussion of Degree of Corrosion as Related to Pipe Friction by Mr. Clark at the Pittsburgh convention of the American Water Works Association.

This diagram merely carries the Williams & Hazen formula for the flow of water in mains one step further and gives an answer in theoretic horse power per 1000 feet of main instead of loss of head in feet per 1000, for any flow in any sized main with any coefficient. The diagram will readily indicate to the Plant Manager operating a pumping station, the theoretic HP required per

1000 feet of main to overcome friction in the main and by comparison, the saving in HP per 1000 feet of main, which could be made by maintaining a high coefficient.

Copies can be obtained by writing to Mr. Clark.

News of the Manufacturers

American Cast Iron Pipe Company, Birmingham, Ala.: They sent out in July an announcement relative to their new Doublex Simplex pipe catalog as follows—

"Our Doublex Simplex pipe catalog has just come from the press, and is now ready for distribution to all users of pipe and fittings. It contains 48 pages of useful information and is profusely illustrated. Being letter size it may be readily filed for future reference.

"This catalog describes in detail Mono-Cast Doublex Simplex cast iron pipe—a product which is being widely used for the distribution of water and gas. It is recommended for both high and low pressures, and hundreds of thousands of feet of it are now in satisfactory service. It has very great possibilities, and is meeting a vital need.

"Doublex Simplex pipe is the outgrowth of two major developments —pipe made centrifugally in refractory molds, and the development of a satisfactory joint embodying the stuffing box gland principle. This pipe has the advantage of cast iron in material and in life, and has the ease of joining characteristic of the bolted flange.

"Specifications governing the manufacture of this product are included in the current edition of our Doublex Simplex catalog. We will be pleased to send a copy of the new catalog to anyone on request."

Sterling Engine Company, Buffalo, N. Y.: Some new and excellent literature is out covering Sterling engine driven generator sets. A booklet illustrates the variety of important duties for which this equipment is employed. The portable mooring mast of the Goodyear-Zeppelin Corp., Akron, Ohio, for mooring the U. S. S. Akron and other rigid airships is powered by a Dolphin T-8 cylinder 240 HP engine driving a 125 KW generator 1200 RPM.

Wallace & Tiernan Company, Inc., Newark, N. J.: We are quoting below news item covering the W & T Electrolytic Chlorinator:

"W & T Develop New Electrolytic Chlorinator—The contamination of small water supplies and swimming pools, especially those on private estates and summer camps, presents a health problem magnified during the summer months. When travel is heavy, water-borne epidemics originating from any of these sources are readily transmitted to unaffected localities.

"Such supplies can be adequately and efficiently chlorinated with the new W & T Electrolytic Chlorinator. Persons entirely unfamiliar with technicalities of chlorination can operate this simple, fool-proof chlorinator.

"The W & T Electrolytic Chlorinator generates chlorine gas from a saturated brine solution, mixes the gas thoroughly with the correct proportion of water and delivers uniform chlorination at the point of application. The rate of gas generation is easily controlled by the simple turning of a rheostat. Should the water supply be accidentally cut off, gas generation automatically stops. Gas is generated only when it may be properly carried away.

"The rugged, sound construction of W & T Electrolytic Chlorinators overcomes many difficulties exist-

ing in other types of cells and assures trouble-free service at low cost. Operation is inexpensive. Current consumption is the equivalent of one 150 watt bulb. Where public utility current is not available, the W & T Electrolytic Chlorinator, Type 6, can be used to operate from dry cells or storage batteries.

"For information about these chlorinators, write to Wallace & Tiernan Company, Inc., Newark, N. J. Technical Publication 149 gives a full description and specifications.

"Strongly build and attractively finished in Duco Gray, W & T Electrolytic Chlorinators conform to the highest standards of appearance."

Coming Meetings

September 22–23—New York Section at Niagara Falls, N. Y. Secretary, E. D. Case, The Pitometer Co., 50 Church St., New York, N. Y.

October 8–9—Central States Section at Cincinnati, O. Secretary, B. J. Lechner, Commissioners of Water Works, 701 French St., Erie, Pa.

October 21–23—Rocky Mountain Section at Denver, Colo. Secretary, D. E. Kepner, Pacific States Cast Iron Pipe Co., 226 Continental Oil Bldg., Denver, Colo.

October 26–27—Wisconsin Section at Hotel Racine, Racine, Wisc. Secretary, L. A. Smith, Supt. of Water Works, City Hall, Madison, Wisc.

October 28–31—California Section at Stockton, Calif. Secretary, E. W. Green, San Jose Water Works, 374 W. Santa Clara St., San Jose, Calif.

October 29–31—Missouri Valley Section at Lawrence, Kans. Secretary, E. L. Waterman, Prof. of Sanitary Engineering, University of Iowa, Iowa City, Ia.

October 30—Minnesota Section at Hotel Lowry, St. Paul, Minn. Secretary, R. M. Finch, Wallace & Tiernan Co., Inc., 614 Flour Exchange Bldg., Minneapolis, Minn.

November 2–4—North Carolina Section at Greensboro, N. C. Secretary, H. G. Baity, Prof. of Sanitary & Municipal Engineering, University of North Carolina, Chapel Hill, N. C.

APPLICATION FOR MEMBERSHIP
IN THE
AMERICAN WATER WORKS ASSOCIATION

29 W. 39th Street, New York, N. Y.

Date:..

..............................hereby make application for..............................

Membership in the American Water Works Association, and inclose herewith the sum of .... Dollars, the required initiation fee and one year's dues in advance.

Name..

Title or Business ....

Address..

....

....

Business or Professional Experience...

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ARTICLE I OF BY-LAWS

Section 3. An Active Member shall be a superintendent, a manager, an official or employee of a municipal or private water works; a civil, mechanical, hydraulic, or sanitary engineer, a chemist, bacteriologist, or any qualified person engaged or interested in the advancement of knowledge relating to water supplies. (Initiation Fee, $5.00; Annual Dues, $10.00.)

Section 4. A Corporate Member shall be a Water Board, Water Commission, Water Department, Water Company or Corporation National State or District Board of Health, or other body, corporation or organization engaged or interested in water supply work, and shall be entitled to one representative whose name shall appear on the roll of members, and who shall have all the rights and privileges of an Active Member. This representative may be changed at the convenience and pleasure of the Corporate Member on written notice to the Secretary. (Initiation Fee, $10.00; Annual Dues, $15.00.)

Section 5. An Associate Member shall be either a person, firm or corporation engaged in manufacturing or furnishing supplies for the operation, construction, or maintenance of water works. (Initiation Fee, $10.00; Annual Dues, $25.00.)

Membership in the Association carries also membership in its Local Sections and National Divisions, and includes the Journal, a monthly publication devoted to water works interest. The proceedings of the annual conventions and of the meetings of the Local Sections are published in the Journal, which also contains contributed articles on subjects pertaining to public water supplies.

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Sanitary Engineering, Univ
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